Response to Comment C35-58 (continued)

Furthermore, Section 15064 incorporates statutory provisions which define "substantial evidence." Specifically, subsection (g), Public Resources Code section 21082.2 provides that the determination of significance shall be based upon substantial evidence in light of the whole record before the agency. This may include materials that are not part of the environmental document, but that are known to and have been considered by the agency. Public Resources Code section 21082.2 states that: "argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly inaccurate or erroneous, or evidence of social or economic impacts which do not contribute to, or are not caused by, physical impacts on the environment, is not substantial evidence." Substantial evidence is defined to include: *"facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts."* (Emphasis added.)

Response to Comment C35-59

The potential impacts referred to in the statement referenced by the commenter on page 3.1-103 are more completely described in the subsequent subsections of the Draft EIR/EIS beginning on page 3.1-104.

Response to Comment C35-60

Even with the IOP and IA in place, many factors impact the amount of water released from Parker Dam, including crops, cropping patterns, and weather. With regard to the 1983-1986 flows being an aberration, even if the 1983-1986 flows are excluded from the calculation as the commenter suggests, the range of flows for the remaining years (1980-2001) is 5,189 KAF with an average of 7,633 KAF. Even with this reduced average, river flow changes for the IOP and IA fall well within the historical range of operations. If only the last seven years are used, 1995-2001, the range of annual flows is 3,661 KAF with an average of 8,117 KAF.

FIGURE C31-2

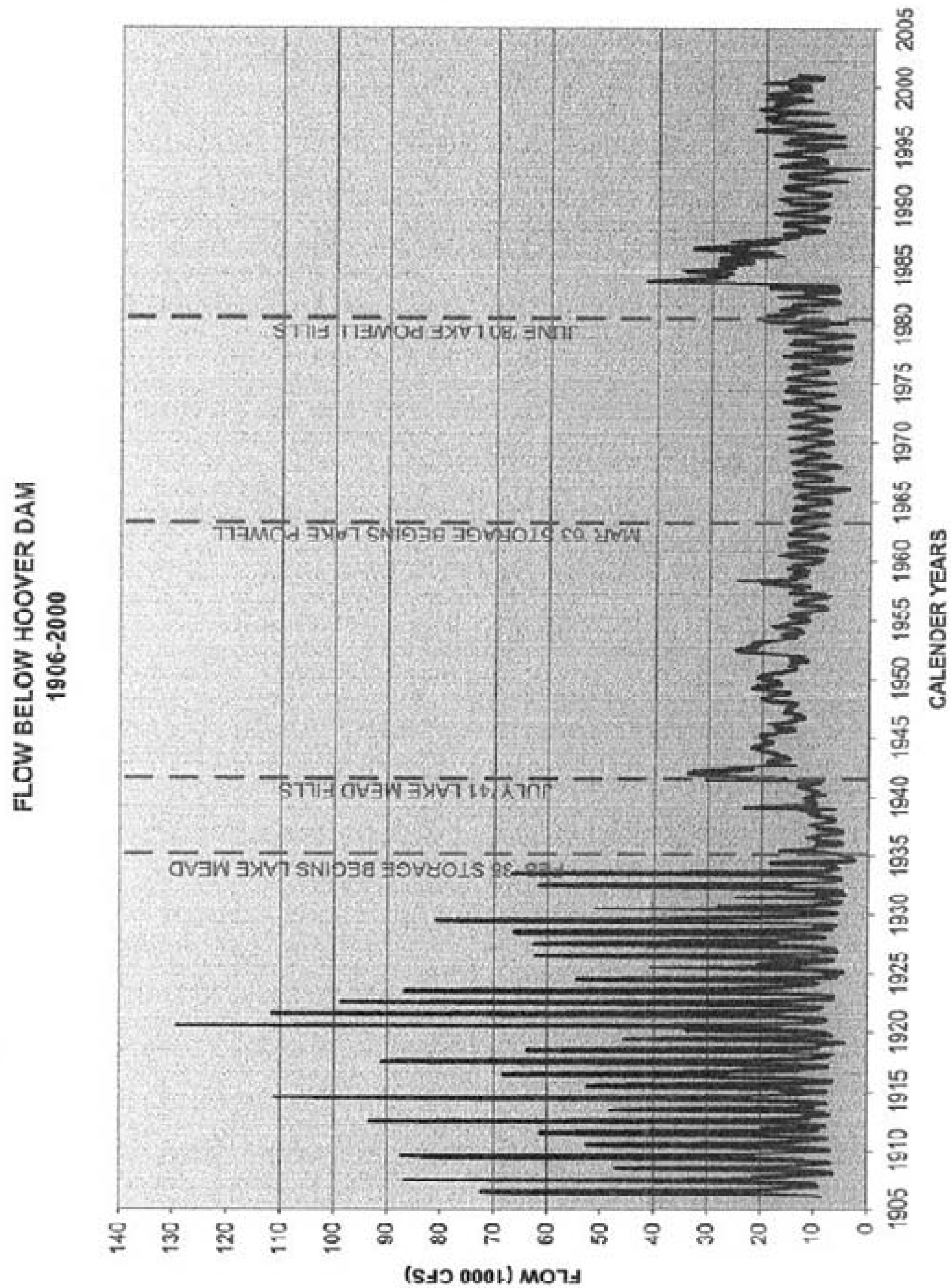

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TABLE C3.1-1: LCR Water Flows Below Lee's Ferry 1980 to 2000

Derived from Table DD - 5: Colorado River Water Use (source: www.lc.usbr.gov)

YEAR	Lower Basin (KAFY)	Mexico (KAFY)	Total LCR (KAFY)	Parker Dam Outflow* (KAFY)	
1980	6046	7040	13087	10574	
1981	6314	2042	8356	5630	
1982	5642	1549	7191	4649	
1983	5394	14190	19583	17234	
1984	5889	15543	21432	19015	
1985	6075	11811	17886	15390	
1986	6274	10814	17088	14419	
1987	6735	4646	11381	8338	
1988	7092	2331	9423	6171	
1989	7530	1590	9120	5534	
1990	7656	1542	9198	5560	
1991	7048	1521	8569	532	1992
6599	1581	8180	4896		
1993	7197	5193	12390	8735	
1994	7614	1526	9140	5560	
1995	7364	1712	9076	5438	
1996	8287	1505	9792	5628	
1997	8347	2872	11219	6922	
1998	7857	4718	12575	8563	
1999	8214	2894	11108	6889	
2000	8213	2037	10250	6000	

* Calculated by deducting Arizona and Nevada data in Table DD-5 and assuming a 1200 AF CRA draw. Derived data can be compared to that provided in Figure 3.1-8: Measured Yearly Flow, Colorado River Above Imperial Dam 1985-1999. Real data is available; I just did not have the time to find it.

C35-60

TABLE C3.1-2: LCR Adjusted Water Balance Values 1995 to 2000*

YEAR	Downstream Parker Dam (KAFY)	Upstream Imperial Dam (KAFY)	Flow Loss** (KAFY)	Mexico Flow*** (KAFY)
1995	6719	5603	1115	1712
1996	7190	6009	1181	1573
1997	8453	7329	1124	2962
1998	10251	9137	1114	4871
1999	8230	7115	1114	2885
2000	7654	6502	1152	2180
AVERAGE	8083	6949	1133	2697

* Source: Lower Colorado River Accounting System
** Flow Loss is water used for M&I, farming, groundwater and evaporation between Parker Dam outflow and Imperial Dam inflow.
*** Mexico entitlement is 1500 KAFY and up to 200KAFY additional of surplus flows

data for Colorado River Water Use (1906 - 2000) - see Table DD-5 in Appendix D Review Comments. Excluding the aberration years (1983 to 1986), peak flow was 13.1 MAF (1980), low flow was 7.2 MAF (1982) and average flow was 10.0 MAF (calculated). If the data is further manipulated to deduct Arizona, Nevada and CRA withdrawals as shown in Table C3.1-1 (Parker Dam Outflow), the numbers for average flow versus peak and minimum flow compresses even further. The data provided in the Parker Dam Outflow column of Table C3.1-1 is, at best, an estimate. Table C3.1-2: LCR Adjusted Water Balance Values 1995 to 2000, provides an accurate flow numbers based on LCRAS. Detail data for the is presented in Tables DD-12 through DD-17, Appendix D Review Comments. The importance of these numbers is in the establishment of water quality impacts in the LCR as a function of reduced average river flows.

C35-60

Page 3.1-104: paragraph 3.1.4.3 Proposed Project, Lower Colorado River - Impact WQ-1: Effects to groundwater, LCR flows and LCR water quality Water Quality

- Statement: "The Colorado River is in hydraulic continuity with the groundwater in the underlying alluvium in the reach from Parker to Imperial Dams. ... Reclamation (model) shows that changing the point of diversion from Imperial to Parker Dam for 400 KAFY could lower the annual median river stage relative to Baseline by as much as 4.4 inches. ... (This) could result in similar declines in groundwater levels ... Reduction in groundwater elevation would be greatest in non-irrigated areas and less severe in irrigated areas." The statement on groundwater elevation impact is only partially true. For areas dependent on well water withdrawal, the lower mean groundwater level results in increased pumping charges. Overall, there is a NEGATIVE IMPACT
- Statement: "Relative to the Baseline, reduction of flow volume during a given season in the reach of the LCR between Parker and Imperial Dams could beneficially impact sediment load in the LCR. ... Reduced flow rate in the LCR could reduce sediment load and, therefore, provide beneficial impact." In the preceding paragraph, Reclamation modeling predicted a drop in river elevation by a mean average of 4.4 inches. This indicated that the river flows are channellized, thus flow rate per unit cross sectional area is relatively constant. Stated differently, reduced flow volume will not materially reduce the flow rate thus there is NO IMPACT on TSS.

C35-61

3.1 - 11

Response to Comment C35-61

It is recognized that as groundwater levels are lowered, there will probably be increased costs to groundwater pumping. However, a reduction in river stage of up to 4.4 inches does not equate to a large reduction in groundwater elevations adjacent to the river, hence the increased costs to groundwater pumping is minimal.

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- Statement: " ...Modeling ... indicated that annual reductions in releases from Parker Dam could result in an increase in salinity concentrations of up to 8 mg/L at Imperial Dam. ... Impacts to water quality in the LCR are anticipated to be less than significant. (Less than significant impact.)". Again, "less than significant" is not defined. In addition, the model results do not fit with simple calculation methodology results. Referring to Table C3.1-2, the upstream flows into Imperial Dam will reduce to an average inflow of 5752 KAFY when surplus flows are limited to provide Mexico with only the 1500 KAFY entitlement. Given that the salt load flowing into the Colorado River between Parker and Imperial will not diminish as a result of the water transfer, they will become more concentrated in the Imperial Dam inflow. With the 300 KAFY water transfer, flow into Imperial Dam will reduce to 5452 KAFY. Utilizing proportionality, a reasonable approximation to the new TDS can be calculated (No Project TDS times No Project Flow equals Project TDS times Project Flow, 879 x 5752 = New TDS x 5452), giving a value of 927 mg/L. This is an increase of 48 mg/L or 5.5% above the original. The impact is SIGNIFICANT. All farm water use out of, and below, the Imperial Dam reservoir will require additional leaching water to maintain soil conditions. Since additional water is not available, farm land will have to be fallowed.

C35-62

The same analysis can be applied to dissolved COC concentrations.

It should be noted that this degradation of water quality IMPACTs Mexico.

Page 3.1-105/111: paragraph 3.1.4.3 Proposed Project, Lower Colorado River - IID Water Service Area and AAC

C35-63

- Paragraph discussing IID Irrigation Water Delivered through the AAC should be expanded to show water input budget similar to that present in comments, page 3.1-32/37. Figure 3.1-26: Proposed Project Average Overall Water Balancing, would require updating to reflect any changes.

C35-64

- In Figure 3.1-26 the water balance for the On-Farm System is NOT BALANCED. Inputs equal 2359 KAF, Outputs, 2359 KAF. The other three systems shown are balanced. For the entire system inputs are 2899 KAF, and outputs, 2933 KAF, again not balanced. In Appendix D it is stated that the summation of inputs must equal the summation of outputs for each subsystem and for the entire model. (See comments, page 3.1-38/49) **The IIDSS MODEL HAS A PROBLEM and needs to be corrected.**

C35-65

- In the paragraph: Collective Drains Discharging to the New and Alamo Rivers, the percentages given need checking. My calculations give 36.1 percent and 30.5 percent, respectively ((431-165)-(335-165))/(431-165)

C35-66

- In the paragraph: Water Quality of New River at the International Boundary, no consideration is given to the decrease in New River water quality relative to historical resulting from use of the poorer water quality being delivered to Mexico below Imperial Dam - see comment, page 3.1-104. Because the water is being utilized primarily in farm operations, the additional dissolved salts and COC will be concentrated, thus causing the TDS and COC concentrations to reflect a higher percentage change than the change in TDS at Imperial Dam.

C35-67

Page 3.1-106/111: paragraph 3.1.4.3 Proposed Project, Lower Colorado River - IID Water Service Area and AAC - Surface Water Quality

- In the paragraph: Impact WQ-2, consideration must be given to the higher TDS and COC concentrations in delivered water - see comment, page 3.1-104.
- Statement, Paragraph: Impact WQ-3: "As noted above and shown in Table 3.1-15, the predicted average annual TSS concentrations for the Proposed Project are lower than the concentrations modeled under the Baseline. ... resulting in a beneficial impact to river water quality." I fail to understand why TSS "concentrations" should be less under the Project than the Baseline. "Concentration is a measure of solids per unit volume. Reducing the volume of drainage water flow does not reduce the concentration, but it does reduce the total volume (cubic feet or weight) of suspended solids delivered. It is not clear that lower tilewater and tailwater flow volumes will

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Response to Comment C35-62

It is recognized that all water users at and below Imperial Dam, including Mexico, are impacted by the salinity of the river flow arriving at Imperial Dam. In 1974, the Colorado River Basin Salinity Control Act was enacted with the purposes of: (1) resolving salinity issues associated with the United States - Mexico Water Treaty deliveries; and (2) creating a salinity control program within the U.S. portion of the Colorado River Basin to maintain salinity standards. The federal/state salinity control program is designed to maintain flow-weighted average annual salinity at or below the adopted numeric criteria. Each of the seven Basin States adopted the EPA-approved salinity standards for the Colorado River Basin, which includes numeric criteria for flow-weighted average annual salinity at three points along the Lower Colorado River. The methodology for analysis of salinity assumes the salinity under No Action Condition to be at the numeric standard for Imperial Dam. The effects of the water transfers are expressed as a departure from the numeric standards. The Colorado River Basin Salinity Control forum, during triennial reviews, reviews current and future water uses and analyzes their impact on the salinity of the Colorado River. If needed, additional salinity control projects are added to the implementation plan to assure compliance with the standards.

Response to Comment C35-63

The description of the Proposed Project water balance and Figure 3.1-26 reflect the water balance derived from the IIDSS. We believe that the modeled water balance is based on the best methods and data available. Therefore, the information presented in the Draft EIR/EIS should remain unchanged.

Response to Comment C35-64

The apparent discrepancy in the water balance that was noted by the commenter is not actually a discrepancy at all, but rather, it is a misinterpretation of the accounting methods used to represent the inflow and outflow components of the water balance. The deficit that was pointed out by the commenter equals the rainfall runoff and deep percolation component (approximately 36 KAFY) shown on Figure 3.1-26, and 37 KAFY shown on subsequent water balance figures. The rainfall runoff and deep percolation component results from non-effective precipitation (i.e., that which is not consumed by crop evapotranspiration) and is calculated as a closure term for the drainage water balance. Even though this component of the water balance occurs in the Basin and is represented as coming from the on-farm system, the actual flow attributed from rainfall runoff and deep percolation originates as precipitation. We will revise the arrows showing this component of inflow on the water balance figures and add a footnote to each figure to clarify this fact.

Response to Comment C35-65

Commented noted. We have reviewed the percentages from the final model runs and have computed values of 32.4 percent for the New River and 31.3 percent for the Alamo River. These changes are included in this Final EIR/EIS in subsection 3.1 under Section 4.2, Text Revisions.

Response to Comment C35-66

Please refer to the Master Response on *Hydrology—Development of the Baseline* in Section 3 of this Final EIR/EIS.

Response to Comment C35-67

The TDS concentrations in supplied water is incorporated into the IIDSS modeling used to estimate water quality conditions in the waters of the IID water service area and All American Canal. Additional information on these assumptions can be found in the Master Response on *Hydrology-Development of the Baseline* in Section 3 of this Final EIR/EIS.

The water contribution to the drains in the IID Service Area comes predominantly from tailwater and tilewater. Since tilewater flows result from groundwater inflows, tilewater is generally very low in TSS. Tailwater, which often passes over fields as surface flow, carries with it generally higher sediment loads as compared with tilewater. Implementation of on-farm conservation measures, often targeting reduction in tailwater, will generally increase the proportion of tilewater in the drains. Therefore, TSS concentrations after implantation of the project will generally be lower in the drains and their receiving waters.

On the Commenter's third point, lower TSS in the drain water does not necessarily correspond to increased buildup of COCs in the soil. Adequate leaching of the soils can still be accomplished while implementing conservation measures to reduce tailwater runoff.

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reduce TSS. On what basis is this termed a beneficial impact? Where is the "as noted above" discussion?

Another concern, if TSS is actually reduced, that implies that the COC's are building up in the soil and not being leached. This is a negative impact to farming operations which counters any beneficial impact of reduced TSS.

- In the paragraphs: Impact WQ-4, WQ-5, WQ-6, WQ-7 and Impact WQ-8, consideration must be given to the higher TDS and COC concentrations in delivered water - see comment, page 3.1-104.
- Impact WQ-4, WQ-6 and WQ-7: Increasing the TDS and COC concentrations in the flow to the Sea is a SIGNIFICANT IMACT given that the volume of the Sea is reduced as a result of the Project. The total quantity of salts being added to the Sea is not changing, but the volume of the Sea into which the salts are being added is reduced, thus the impact to the sea is greater TDS and COC concentrations above that of the Baseline. This leads to a 11 year acceleration in the Sea reaching the point of no fish reproduction, again a VERY SIGNIFICANT IMPACT. Adding a pound of salts to 10 gallons of water produces significantly different results than in salinity than adding the same pound of salts to 15 gallons. See comments, page 3.1-101/102
- .Impact WQ-8: Over time the flow of higher TDS and COC concentrates in leaching water to the groundwater will have significant impact on groundwater quality. In San Diego County, years of Colorado River water application to surface ground has leached the salts from the applied Colorado River water into the water table, and in doing so has made the groundwater unsuitable for most applications. Those wells within Imperial Valley which are still usable, will be impacted.

C35-67

C35-68

Page 3.1-112/119: paragraph 3.1.4.3 Proposed Project, Lower Colorado River - IID Water Service Area and AAC - Inadvertent Overrun and Payback Policy

- Statement: Conservation of 59 KAFY for the IOP can be accomplished through ... Hydrologic impacts of the IOP have been modeled to reflect the worst case average condition over the period of the project. This assumption results in an average annual payback of 59 KAFY. ..." It is not clear where the 59 KAFY average annual payback is derived. If I understand the IOP, it is designed to provide for recovery to the LCR of any excess short-term consumptions by users. That is, if IID takes 100 KAF in excess in a given year, or sequence of years, the IOP requires IID to draw 100 KAF less over subsequent years until the excess draws have been fully compensated. A water entitlement balance is thus achieved. The net effect of the term of the Project is zero, relative to the water budget, not 59 KAFY. Subsequent to writing this comment I found in Appendix, page 3-16, the following statement: "The average IID/CVWD overrun volume (diversions above 3.43 MAF at Pilot Knob) from the 12-year historical database is 59,210 AF. This overrun volume was assumed to be repaid during each year for all 75-year simulations." Whether this is the IOP item being referred to is unclear. Twelve years at 59.2 KAFY yields a net deficit of 710.5 KAF. Repaid over a 75 year interval, would yield 9.5 KAF per year, not 59 KAFY. This item needs better explanation.

C35-69

Page 3.1-120: paragraph 3.1.4.3 Proposed Project, Lower Colorado River - IID Water Service Area and AAC - Salton Sea

- In the paragraph discussing Water Quantity, it would be appropriate to include information on the Sea's volume, current and projected.
- The SSAM model results data presented in Figure 3.1-28: USBR Model Results: Proposed Project Graphs of Salton Sea, and the discussion of these data will have to be revisited due to the higher TDS and COC concentration in the water being delivered to the IID service area as a result of the Project. See comments, page 3.1-104.The higher TDS will cause the Sea to reach the critical 60,000 mg/L TDS before 2012. Figure 3.1-29: USBR Model Results: Proposed Project - U.S. Project Alternatives Comparison of TDS Concentrations in the Salton Sea, will also require modification.

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Response to Comment C35-68

Please refer to the Master Response on *Hydrology—Development of the Baseline* in Section 3 of this Final EIR/EIS.

Response to Comment C35-69

The TDS concentrations in supplied water is incorporated into the IIDSS modeling used to estimate water quality conditions in the waters of the IID water service area and All American Canal. Additional information on these assumptions can be found in the Master Response on *Hydrology—Development of the Baseline* in Section 3 of this Final EIR/EIS.

- To get historical perspective, Figure 3.1-28 should be expanded to show surface elevation, surface area and salinity data from 1960 onward. It is only then that the true impact of the increased growth in salinity level gains perspective.
- Impact WQ-11: There is no dispute that the water column level of selenium and other COCs will be at low levels. However, the concentration of these COCs in the sediment will be increased by the Project relative to the Baseline. The higher concentrations of the COC in the Sea inflows, New and Alamo Rivers and Direct as shown in Tables 3.1-15 through 3.1-17, will precipitate out of the water column, either by chemical or biological action, onto a smaller acreage seabed floor, thus leading to the higher sediment concentration and stable water column concentrations. . These higher sediment concentrations will impact biological resources feeding on, or in the sediment layer, both offshore and onshore as the sea recedes and exposes the seabed. SIGNIFICANT IMPACT could result, but is currently unknown. The paragraph following Impact WQ-12 discussion provides the same overview and further states that COC "... concentrations in sediment do not constitute an impact to water quality based on the water quality significance criteria." Yet, in the discussion of WQ-12, sediment is used to make the significance criteria statement: "... impacts to sediment quality from the Proposed Project are anticipated to be less than significant. (Less than significant impact.)" Sediment is a water quality issue because sediment quality is a direct function of water quality.
- Impact WQ-12: The conclusion that COC buildup in seabed sediment for the Project will be less than that of the Baseline because TSS numbers for the Sea inflows are less under the Project (validity questioned - see comment, page 3.1-106/111) is not supportable. Even if Project TSS is reduced by 20% relative to Baseline, the Projects reduction in Sea surface area (also seabed area) relative to the Baseline, causes the COC's to be more concentrated in the sediment under the Project. As a result, impacts to sediment quality from the Proposed Project are anticipated to be SIGNIFICANT, but are currently unknown.
- Impact WQ-13: HCP Approach 2 is designed to maintain Salton Sea inflows at Baseline levels. Given the Project transfer of 300 KAFY, HCP Approach 2 must provide for 300 KAFY. This water volume will have to come mostly from fallowing. The quality of this water, being a direct discharge to the Sea without having the TDS and COC concentrating aspect of farming operations, will fully mitigate the water quality impacts of the Project. Additionally, since less land is being farmed due to the fallowing, there will be less pesticide/herbicide residual flows to the Sea, a net BENEFICIAL IMPACT. Unfortunately, there is also a potential negative impact. Fallowing land will reduce valley average humidity. Lower humidity means increased evaporation from the Sea. Only to the extent that water from fallowed land replaces transfer water and the increased sea surface evaporation, will there be no impact.

C35-69

C35-70

Page 3.1-127: Paragraph 3.1.4.4 Alternative 1: (No Project) - IID Water Service Area and AAC, Surface Water Quantity

- In the paragraph IID Irrigation Water Delivered Through the AAC, the water quantity at Mesa Lateral 5 is not justified. A water accounting budget similar to that which I presented in comments, page 3.1-32/37 is required. Special emphasis needs to be placed on explaining why Mesa Lateral number is reduced from the Existing Setting 2866 KAFY value to the No Project 2803 KAFY value.
- Figure 3.1-30; Baseline/No Project: Alternative 1 - Average Overall Water Balance, has the same input/output flow balance problem previously discussed - see comments, page 3.1-105/111.
- Surface water quality is IMPACTED in comparing the Existing Setting to the No Project. Using the same arguments presented on surface water quality for the Proposed Project impacts within the IID service area, because the flows in the Baseline are reduced from those of the Existing Setting. TSS numbers will be reduced, and TDS and COC increased, for the Baseline relative to the Existing Setting. What this means is that the TDS, COC and TSS numbers from the Existing Setting are NOT directly applicable to the Baseline. They must first be passed through the IIDSS model.

Response to Comment C35-70

A thorough water accounting budget was developed for the Draft EIR/EIS and used to compute flow at the Mesa 5 Lateral. The difference between the historical flows at this location and those used in the Baseline are the result of the Baseline adjustments. For additional information, please refer to the Master Response on *Hydrology—Development of the Baseline* in Section 3 of this Final EIR/EIS.

As noted earlier, the Baseline water balance does close correctly if factors that were neglected from the balance are incorporated (e.g., effective precipitation).

This comment is correct. The flow and TDS adjustments made in development of the Baseline do lead to a change in the leaching fraction, a change in the distribution of runoff between tailwater and tilewater, and other changes in flow paths that alter water quality. Please refer to the Master Response on *Hydrology—Development of the Baseline* in Section 3 of this Final EIR/EIS, and its description of the impact of Baseline modifications on IIDSS inputs. Also, refer to the Master Response on *Hydrology—Selenium Mitigation,* which describes how Baseline adjustments affect modeling of selenium.

(Bullets 4 and 5) The Appendix of the Draft EIR/EIS entitled Salton Sea Accounting Model includes plots of the Sea's elevation and salinity that present data beginning in 1950. This appendix also includes an area/elevation/capacity table that permits conversion of elevation data presented in the appendix to storage volumes.

The quantity of sediment transported to the drainage system by tailwater will be reduced by conservation measures that reduce tailwater discharge. It is not clear what is being implied by the commenter's reference to sediment quality.

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C35-70
Page 3.1-128: Paragraph 3.1.4.4 Alternative 1: (No Project) - IID Water Service Area and AAC, Salton Sea

- In the paragraph discussing Water Quantity, it would be appropriate to include information on the Sea's volume, current and projected
- To get historical perspective, Figure 3.1-31 should be expanded to show surface elevation, surface area and salinity data from 1960 onward. It is only then that the true impact of the increased growth in salinity level gains perspective
- In the paragraph discussing Sediment Quality, the comment made on surface water impacts - see comments, page 3.1-127- are applicable. Sediment quality will decrease relative to the Existing Setting values. If I believed the arguments presented in paragraph 3.1.4.3 . Impact WQ-12, sediment quality would improve over the Existing Setting value. -see comments, page 3.1-120.

C35-71
Page 3.1-131/141: paragraph 3.1.4.5 Alternative 2 (A2): Water Conservation and Transfer of up to 130 KAFY to SDCWA

- All the comments made for paragraph 3.1.4.3 are applicable.

C35-72
Page 3.1-142/150: paragraph 3.1.4.6 Alternative 3 (A3): Water Conservation and Transfer of Up to 230 KAFY to SDCWA, CVWD, and/or MWD

- All the comments made for paragraph 3.1.4.3 are applicable

C35-73
Page3.1-151/159: Paragraph 3.1.4.7 Alternative 4 (A4): Water Conservation and Transfer of Up to 300 KAFY to SDCWA, CVWD, and/or MWD

- All comments made for paragraph 3.1.4.3 are applicable. A few of the comments have been expanded upon in the following.
- Paragraph on Water Conservation and Transfer, Statement: " ... The reduction in flow in the reach between Parker and Imperial dams of up to 300 KAFY has the potential to result in beneficial and less than significant impacts." The comment review for paragraph shows that there are no beneficial impacts and that SIGNIFICANT impacts have the potential to exist.
- Paragraph on Water Quality statement: " ... The potential change (river flow volume) under Alternative 4 is anticipated to be within the future normal fluctuation of the river." Statement is true, but the average flow of the river will be reduced by up to 300 KAFY, and this does have an impact. Reducing the average flow, increases the average TDS and COC concentrations.
- Impact A4-WQ-1: There are no differences in the analysis for Alternative 4 and the Proposed Project. My review comments for the Proposed Project clearly show that there are no beneficial impacts, and that the range of impacts can be rated less than significant (not defined) to SIGNIFICANT.

C35-74
Page3.1-151/159: Paragraph 3.1.4.7 Alternative 4 (A4): Water Conservation and Transfer of Up to 300 KAFY to SDCWA, CVWD, and/or MWD - IID Water Service Area

- In the paragraph IID Irrigation Water Delivered Through the AAC, the water quantity at Mesa Lateral 5 is not justified. A water accounting budget similar to that which I presented in comments, page 3.1-32/37 is required. Special emphasis needs to be placed on explaining why Mesa Lateral number is reduced from the Proposed Project 2495 KAFY value to the Alternative 4 2490 KAFY value.
- Impact A4-WQ-2, A4-WQ-3, A4-WQ-5 and A4-WQ-7: It is unclear as to why the IIDSS model shows selenium, TDS and TSS concentrations to be lower than for the Baseline. The drainage is off fewer acres due to the fallowing, thus the total volume of TDS, TSS and COC components is reduced, but only in proportion to the reduction in water, thus the concentrations should remain unchanged relative to the No Project Baseline. If this were not true, the components of TDS and COC would build up in the soil and eventually cause cropping problems. The TDS and COC components must be leached to maintain profitable farming operations. If TSS is lower in the

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Response to Comment C35-71

Refer to Responses for C35-59 through C35-69.

Response to Comment C35-72

Refer to Responses for C35-59 through C35-69.

Response to Comment C35-73

Refer to Responses for C35-59 through C35-69.

Response to Comment C35-74

A complete water balance was performed for Alternative 4. Because demands for deliveries of irrigation water are 100 KAFY lower under Alternative 4 than under the Proposed Project, less water is run through the delivery system to farm gates. This reduction in the volume of delivered water results in reduced system losses through seepage, spillage, and evaporation. This reduction in conveyance losses is the reason for the slightly lower flow demands at Mesa Lateral 5 under this alternative than were modeled for the Proposed Project.

Because of the extensive use of fallowing in these alternatives, a larger proportion of water discharged at the outlets of the New and Alamo Rivers is contributed by spillage, flow across the International Boundary in the New River, municipal and industrial discharges, and other sources lower in TDS than tilewater and lower in TSS than tailwater, both of which are essentially eliminated on fallowed ground.

Because of the reduction in tailwater discharge resulting from fallowing and from on-farm water conservation measures, TSS discharge is reduced under these alternatives, as is the discharge of other constituents conveyed to district drains through tailwater.

drain IID drainwater, it means that the COCs are precipitating into the sediment within the drain system. A temporary event, such as a thunderstorm runoff through the drainage system, will re-suspend the sediment, and push in bulk to the drainage outflow. Effectively, this means that the total volume of suspended solid delivered to the drain outfall is a constant proportional to the farming system input water. The result is NO IMPACT.

- Impact A4-WQ-4 and A4-WQ-7: Again, it is unclear why the IIDSS model shows TSS being less under alternative 4 than the Baseline. If TSS is lower in Alternative 4 river discharge to the Sea than it is for the Baseline, it means that the COCs are precipitating into the sediment within the river system. A temporary event, such as a thunderstorm runoff through the river drainage system, will re-suspend the sediment, and push it in bulk to the drainage outflow. Effectively, this means that the total volume of suspended solid delivered to the drain outfall is a constant proportional to the farming system input water.. Thus the result is NO IMPACT.

C35-74

END OF **SECTION 3.1** COMMENTS